OPINIONS OF TEACHERS FOR EFFECTIVENESS OF SMART CLASSROOM TEACHING IN SOCIAL SCIENCE FOR SEVENTH GRADERS- AN ANALYSIS

Madhu Gupta [1] | Kuldeep Singh [2]

[1] Professor and Former Head, Department of Education, MD University,   Rohtak (HR).

[2] Research Scholar, Department of Education, MD University, Rohtak (HR).

ABSTRACT

In recent times, the world has witnessed a rapid increase in technological innovations. The teacher of today realizes the need for presenting different learning experiences to suit individual differences among pupils and attempts to use the modern and latest media and methods like smart classrooms. Teachers have started experimenting the change in teaching method and methodology. The traditional blackboard approach is gradually giving way to more interactive session between the instructor and students. In this context, an effort has been made to assess the opinions of teachers for effectiveness smart classroom teaching in Social Science for seventh graders with respect to content presentation, utility for students and utility for teachers. In the present study, an opinionnaire was developed to seek the opinions of the teachers about the effectiveness of smart classroom teaching with respect to content presentation, utility for students and utility for teachers. The opinionnaire was given to 40 teachers individually from various senior secondary schools equipped with smart classrooms of Haryana. The results of the study revealed that 80.19% of teachers have favourable opinion towards smart classroom teaching with respect to content presentation, utility for the students and utility for the teachers. The study further revealed that 7.78% of teachers were found having non-favourable opinion towards smart classroom teaching and 12.02% of teachers remained undecided about the effectiveness of smart classroom teaching. The analysis disclosed the fact that the smart classroom teaching is highly useful for teachers as well as students. It is very helpful determined in increasing the achievement level of students at own pace in motivating and fascinating way in today competitive education system.

KEYWORDS: Smart Classroom Teaching and Seventh Graders.

INTRODUCTION

Today, in the era of science and technology, learning styles of the students are changing rapidly. In Ancient times, students used to stay in Gurukuls where the teacher had full time and responsibility to shape their life for their betterment and the society. Then the system changed with the time to schooling where students went for specific period and teacher delivered lecture and used blackboard and chalk for making the students understand the subject better. In this traditional approach, teachers shouldered most of responsibilities for teaching in the classroom to make sure everything they taught were understood by the students in the limited period of time. With the passage of time and technological enhancement, education system has undergone various changes. In recent times, the world has witnessed a rapid increase in technological innovations. The teacher of today realizes the need for presenting different learning experiences to suit individual differences among pupils and attempts to use the modern and latest media and methods like smart classrooms. Teachers have started experimenting the change in teaching method and methodology. The traditional blackboard approach is gradually giving way to more interactive session between the instructor and students. Dynamic progress in information technologies has necessitated the change in educational process, its purpose, in developing new pedagogical technologies, and to introduce more effective methods and means of teaching.

ICT has the potential to bring real life issues into classrooms in a way that was not possible before in a traditional classroom setting. The flexible nature of ICT and the internet especially provide pupils (and others) with the opportunities for research, interaction, cooperation and collaboration (Cole, 2000). Utilizing moving and still images, conducting life histories, carrying out social research through ICT might make social studies meaningful and enjoyable which is otherwise might be considered a dull subject by some pupils (Dawson et al., 2000). ICT has tools for teaching, learning, research, information and interaction for pupils and educators. ICT integration into education might also have some ramifications for social studies (Beck & Eno, 2012). Especially, its ability to bring visual images of real life experiences through movies, documentaries and still images has great potential for younger pupils (Voogt, 2008).

In the recent uses of ICT in the field of education, smart classroom teaching encompasses a wide range of applications and technology in the field of education and entertainment. Smart class is nothing, but a unique and latest way to teach children. In this technique, a broad screen is there on the wall (like blackboard) and a projector is fixed on the roof so as its rays reflect upon the screen. Through this technique, it is very easy to learn things. This technique works like a computer screen and also like a blackboard. For example, in ancient time, teachers used to teach us about any picture say, solar system, just by raising up her book and tell us about it. Student sitting away from teacher were really unable to grasp the things properly. But now, any such picture appears on the screen and all the students can easily see and understand topic easily. Smart class is an effective way of teaching method. It is entirely different from the old way of teaching by writing on black board. Here the projectors or screens are raised where the students can visualize and learn almost everything. They get a chance to see the

experiments, incidents etc., they can hear, see and learn through smart class. It is an interesting method of learning and the students get a chance to escape from the boredom of sleepy classes.

Sevindik (2010) showed that lectures given through smart classroom significantly increases the academic achievements of the students. Jena (2013) also revealed that smart class learning environment is better to teach both low achievers and high achievers than traditional class. Gupta and Chirag (2014) found that Multimedia Teaching Package (MMTP) was very helpful in enhancing the achievement of students. Gupta and Lata (2014) revealed that students taught through ITEIP showed significant improvement in their achievement in science than the students taught through Conventional Method. Chachra (2015) showed that the teaching through smart class room is more effective than conventional teaching at all the three intelligence levels. Menon (2015) revealed that students achieved higher when taught in smart classes as compared to conventional mode of instruction. Bano (2016) revealed that smart classroom learning positively affects the performance of students in English. All the studies mentioned above revealed that the students have significantly higher achievement when taught through smart classroom teaching than traditional classrooms. Hence, the investigators make an effort to undertake the current study to look for the opinion of teachers for effectiveness of smart classroom teaching for seventh graders.

OBJECTIVES OF THE STUDY

The present study is designed to realize following objectives:

1.   To develop an Opinionnaire to know the opinions of teachers towards effectiveness of smart classroom teaching in Social Science for seventh graders.

2.   To analyze the opinions of teachers for the effectiveness of smart classroom teaching in Social Science for seventh graders.

DESIGN OF THE STUDY

Method Used

Descriptive method was used in the present investigation.

Sample

In order to obtain the ratings of teachers on various statements regarding effectiveness of smart classroom teaching, the opinion scale was given to 40 teachers individually from various CBSE affiliated schools of district Jhajjar (HR). Opinion on various aspects of smart classroom teaching like presentation of content, utility for students and utility for teachers were elicited.

Tool Used

Opinionnaire for Effectiveness of Smart Classroom Teaching developed by the investigator himself was used to seek the opinions of teachers about the effectiveness of smart classroom teaching.

The opinionnaire consisted of 20 positive statements on effectiveness of smart classroom teaching has been divided into three parts i.e. (i) content presentation

(consists of five positive statements) (ii) utility for student (consists of seven positive statements) (iii) utility for teachers (consists of eight positive statements).The method of assessment of each parameter is based on three point scale i.e. A: stands for Agree; DA: stands for Disagree and UD: stands for Undecided. For scoring the opinionnaire, a score of '1', '0', and None was given to category Agree, Disagree, and Undecided respectively. The sum of these values gives the effectiveness of smart classroom teaching.

Statistical Technique Employed
Percentage has been employed to show the responses of the teachers on all the 20 positive statements of the opinionnaire.

ANALYSIS AND INTERPRETATION
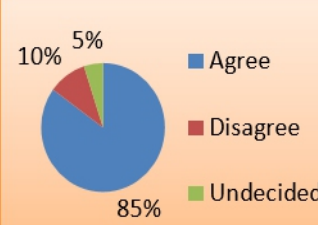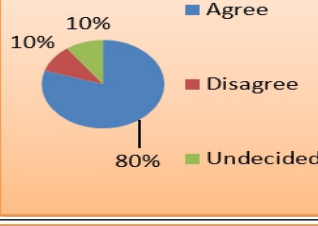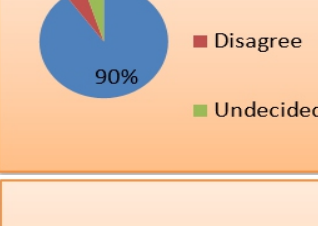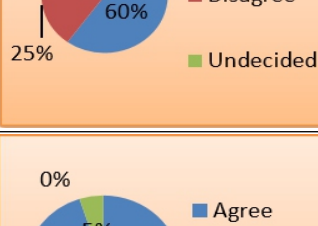Analysis and interpretation section has been divided into following four sub-sections:
• Analysis of opinions of teachers for the effectiveness of smart classroom teaching with respect to content presentation.

• Analysis of opinions of teachers for the effectiveness of smart classroom

teaching with respect to utility for the students.

• Analysis of opinions of teachers for the effectiveness of smart classroom teaching with respect to utility for the teachers.

• Analysis of overall opinions of teachers for the effectiveness of smart classroom teaching with respect to content presentation, utility for students and utility for teachers.

1. Analysis of Opinions of Teachers for the Effectiveness of Smart Classroom Teaching with respect to Content Presentation.
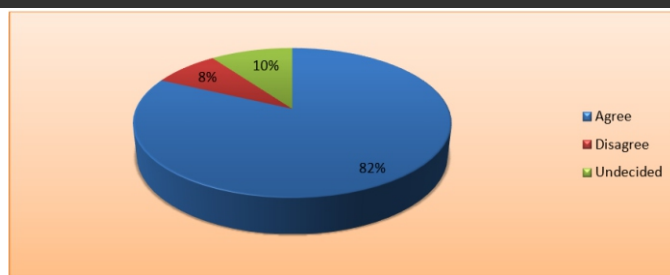
In this section, opinions of teachers for the effectiveness of smart classroom teaching with respect to content presentation. The opinions of teachers towards the effectiveness of smart classroom teaching with respect to content presentation have been presented in the form of percentage and pie chart in table 1. The overall opinion of teachers towards the effectiveness of smart classroom teaching with respect to content presentation has been given in table 2 and in Fig.1.

Table- 1
Statement-wise Opinions (in %) of Teachers about Effectiveness of Smart Classroom Package in Social Science with respect to Content Presentation

Part A: Content Presentation

SN	Statement	A	DA	UD	Pie Chart
A1	The Content of Smart Classroom Package is as per the syllabus prescribed by CBSE.	34 (85%)	4 (10%)	2 (5%)	
A2	The language of the subject matter taught through Smart Classroom Package is according to the mental level of the learners.	32 (80%)	4 (10%)	4 (10%)	
A3	The sound is clearly audible and the quality of Audio is high.	36 (90%)	2 (5%)	2 (5%)	
A4	Simple and relevant examples are used in Smart Classroom Package for the explanation of the content.	24 (60%)	6 (15%)	10 (25%)	
A5	Smart classroom package is attractive for students as multimedia effects increase the student's attention.	38 (95%)	0 (0%)	2 (5%)	

Table-2
Overall Opinion (in %) of Teachers towards Effectiveness of Smart Class-room Package with respect to Content Presentation

Overall Opinion	Agree (A)	Disagree(D)	Undecided (UD)
Content Presentation	82%	8%	10%

A close perusal of Table- 2 reveals that 82% of teachers are of the opinion that (i) the content of the teaching with smart classroom is as per syllabus prescribed by CBSE; (ii) language of the subject matter taught through smart classroom is according to the mental level of the students; (iii) the sound used in the smart classroom package is clearly audible and the quality of audio is high; (iv) simple and relevant examples are used in the smart classroom teaching and (v) multimedia effects used in the smart classroom increase students' concentration. Table- 2 further shows that 8% of teachers have unfavourable opinion and 10% of teachers remained undecided about effectiveness of smart classroom package with respect to content presentation. The same has been presented in the form of pie chart in Fig.1.

Fig. 1: Teachers Overall Opinion about Effectiveness of Smart Classroom Package with respect to Content Presentation

2. Analysis of Opinions of Teachers for the Effectiveness of Smart Class-room Teaching with respect to Utility for Students.

Opinions of teachers for the effectiveness of smart classroom teaching with respect to utility for the students have been analyzed in this section. The opinions of teachers towards the effectiveness of smart classroom teaching with respect to utility for the students have also been presented in the form of percentage and pie chart in table-3. The overall opinions of teachers towards the effectiveness of smart classroom teaching with respect to utility for the students have been given in table 4 and in Fig. 2.
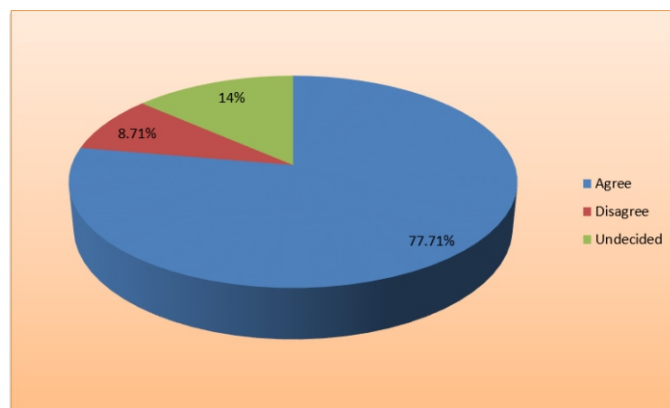
Table- 3
Statement-wise Representation of Opinion of Teachers about Effectiveness of Smart Classroom Teaching in Social Science with respect to Utility for Students

Part B: Utility for Students					
SN	Statement	A	DA	UD	Pie Chart
B1	Smart Classroom teaching makes all the confusion and questions clear in the lesson to the students.	36 (90%)	0 (0%)	4 (10%)	
B2	Smart classroom teaching package is very helpful for the slow learners.	28 (70%)	10 (25%)	2 (5%)	
B3	The smart classroom learning improves the quality of education than traditional learning.	32 (80%)	0 (0%)	8 (20%)	
B4	Smart Classroom presents information more effectively than the Traditional presentation.	30 (75%)	6 (15%)	4 (10%)	

B5	Students' achievement is highly affected by the usage of smart classroom package in teaching.	33 (84%)	5 (11%)	2 (5%)	
B6	Smart classroom teaching gives the students freedom to express themselves.	28 (70%)	4 (10%)	8 (20%)	
B7	Smart Classrooms encourage students to participate in learning.	30 (75%)	0 (0%)	10 (25%)	

Table -4
Overall Opinion (in %) of Teachers towards Effectiveness of Smart Classroom Teaching with respect to Utility for Students

Overall Opinion	Agree (A)	Disagree(D)	Undecided (UD)
Utility for Students	77.71%	8.71.%	13.57%

A close perusal of Table 4 shows that 77.71/% of teachers have favourable opinion about the effectiveness of smart classroom teaching package with respect to utility for students and believe that (i) smart classroom teaching makes all the confusion and questions clear in the lesson to the students; (ii) smart classroom teaching package is very helpful for the slow learners; (iii) smart classroom learning improves the quality of education than traditional learning; (iv) smart classroom presents information more effectively than the traditional presentation; (v) students' achievement is highly affected by the usage of smart classroom package in teaching; (vi) smart classroom teaching gives the students freedom to express themselves and (vii) smart classrooms encourage students to participate in learning. Table 4 further reveals that 8.71% of teachers have unfavourable opinion and 13.57% of teachers remained undecided about effectiveness of smart classroom teaching with respect to importance for students. The same has been presented in the form of pie chart in Fig.2.

Fig. 2: Teachers Overall Opinion about Effectiveness of Smart Classroom Teaching with respect to Utility for Students

3. Analysis of Opinions of Teachers for the Effectiveness of Smart Classroom Teaching with Respect to Utility for Teachers.

In this section, opinions of teachers for the effectiveness of smart classroom teaching with respect to utility for teachers. The opinions of teachers towards the effectiveness of smart classroom teaching with respect to utility for teachers have been presented in the form of percentage and pie chart in table 5. The overall opinions of teachers towards the effectiveness of smart classroom teaching with respect to utility for teachers have also been given in table 6 and in shown in Fig. 3.

Table- 5
Statement-wise Representation of Opinion of Teachers about Effectiveness of Smart Classroom Teaching in Social Science with respect to Utility for Teachers

Part C: Utility for Teachers					
SN	Statement	A	DA	UD	Pie Chart
C1	Smart Classrooms teaching saves time and energy of teachers.	38 (95%)	0 (0%)	2 (5%)	

C2	With Smart Classroom Package, teachers can efficiently manage their classrooms and deliver lessons.	30 (75%)	0 (0%)	10 (25%)

C3	Smart Classroom teaching support the interaction between teacher and students during a lesson	38 (95%)	0 (0%)	2 (5%)

C4	Smart Classroom teaching reduces the efforts of the teacher.	28 (70%)	8 (20%)	4 (10%)

C5	Smart Classroom teaching replaces traditional teaching method of using blackboards	38 (95%)	0 (0%)	2 (5%)

C6	Smart Classroom Teaching makes teachers more comfortable during teaching.	28 (70%)	5 (12%)	7 (18%)

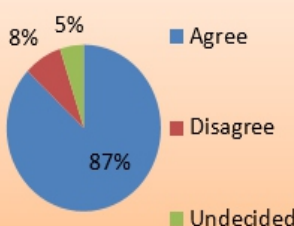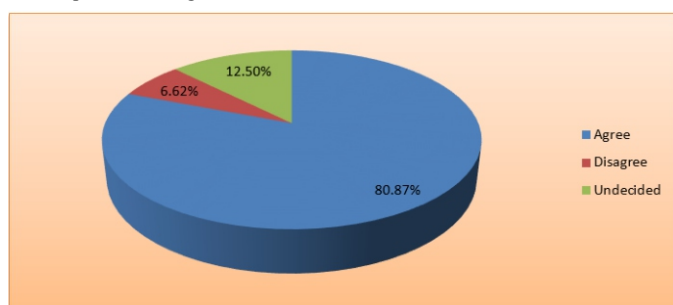|				
C7	Teachers feel happy while teaching through smart classroom package.	24 (60%)	5 (13%)	11 (27%)

C8	Smart Classes are very helpful for professional development among teachers.	35 (87%)	3 (8%)	2 (5%)	

Table -6

Overall Opinion (in %) of Teachers towards Effectiveness of Smart Classroom Teaching with respect to Utility for Teachers

Overall Opinion	Agree (A)	Disagree(D)	Undecided (UD)
Utility for Teachers	80.87%	6.62%	12.5%

A close perusal of Table 6 reveals that 80.87% of teachers have favourable opinion about the effectiveness of smart classroom teaching package with respect to utility for teachers and believe that (i) smart classrooms teaching saves time and energy of teachers ;(ii) with smart classroom teaching, teachers can efficiently manage their classrooms and deliver lessons; (iii) smart classroom teaching support the interaction between teacher and students during a lesson ; (iv) smart classroom teaching reduces the efforts of the teacher smart classroom presents information more effectively than the traditional presentation; (v) smart classroom teaching replaces traditional teaching method of using blackboards; (vi) Smart Classroom Teaching makes teachers more comfortable during teaching (vii) Teachers feel happy while teaching through smart classroom package and (viii) Smart Classes are very helpful for professional development among teachers. Table 6 further reveals that 6.62% of teachers have unfavourable opinion and 12.5% of teachers remained undecided about effectiveness of smart classroom package with respect to utility for teachers. The same has been presented in the form of pie chart in Fig.3.

Fig. 3: Teachers Overall Opinion about Effectiveness of Smart Classroom Package with respect to Utility for Teachers

4. **Analysis of Overall Opinions of Teachers for the Effectiveness of Smart Classroom Teaching with Respect to Content Presentation, Utility for Students and Utility for Teachers.**
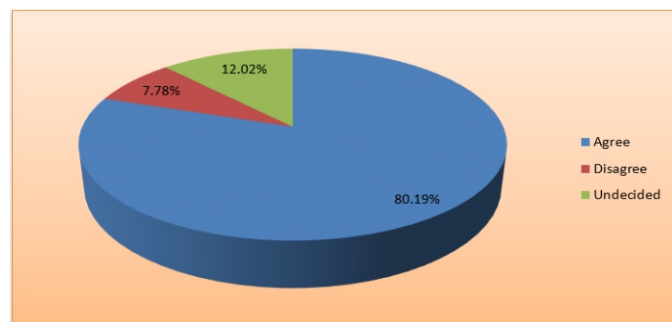
Analysis of overall opinion of teachers for the effectiveness of smart classroom teaching with respect to content presentation, utility for students and utility for teachers have been given in table 7 and have also been presented in the form of pie chart in Fig. 4.

Table -7

Overall Opinion (in %) of Teachers towards Effectiveness of Smart Classroom Teaching with respect to Content Presentation, Utility for Students and Utility for Teachers

Overall Opinion	Agree (A)	Disagree(D)	Undecided (UD)
Overall	80.19%	7.78%	12.02%

A close perusal of Table 7 indicates that as far as overall opinion of teachers are concerned, it can be concluded that 80.19% of teachers have favourable opinion towards smart classroom teaching with respect to content presentation, utility for the students and utility for the teachers. It can also be inferred from table 7 that 7.78% of teachers were found having non-favourable opinion towards smart classroom teaching. Table 7 further indicates that 12.02% of teachers remained undecided about the effectiveness of smart classroom teaching on various aspects as content presentation, utility for the students and utility for the teachers.

Fig. 4: Overall Opinion of Teachers about the Effectiveness of Smart Classroom Teaching.

CONCLUSION

Dynamic progress in information technologies has necessitated the change in educational process, its purpose, in developing new pedagogical technologies, and to introduce more effective methods and means of teaching. In the present era of science and technology, most of the teachers generally adopt two types of method i.e. smart classroom teaching and conventional method of instruction. The current study was carried out to look for the opinion of teachers towards the effectiveness of smart classroom teaching in social science for seventh graders. After getting responses from teachers, it was found that most of the teachers were having favourable opinions towards effectiveness of smart classroom teaching. Almost all the teachers believe that smart classroom teaching is very helpful in increasing the achievement level of the learners than the traditional classroom teaching. Smart classroom technology empowers the educational process by means of increased interaction between teachers and the students and can provide them with endless possibilities of quality teaching and learning. Smart classroom teaching- learning develops power of communication among the students. It is very helpful in creation of enjoyable environment in class. The students get a chance to see the experiments, incidents etc., they can hear, see and learn through smart class. It is an interesting method of learning and the students get a chance to escape from the boredom of sleepy classes.

REFERENCES
1. Bano, N. (2016). Impact of smart classroom learning environment on the performance of first grade students in English. FUNOON- An International Journal of Multidisplinary Research, 2(1), 121-128.
2. Beck, D., & Eno, J. (2012). Signature pedagogy: A literature review of social studies and technology research. Computers in Schools, 29, 70-94.
3. Chachra, I. K. (2015). Effect of smart classroom assisted teaching on academic achievement of students of different intelligence level in social science. Abhinav National Monthly Refereed Journal of Research in Arts and Education, 4(6), 4-10.
4. Cole, R. (2000). Issues in web-based pedagogy. London: Greenwood Press.
5. Dawson, K., Bull, G. & Swain, C. (2000). Considerations for the diffusion of technological innovations in social studies teaching and learning. Theory and Research in Social Education, 28(4), 587-595.
6. Gupta, M. & Chirag (2013). Opinion of subject experts for effectiveness of multimedia teaching package in mathematics for fifth graders: An Analysis, GALAXY International Interdisciplinary Research Journal 1(2),116-125.
7. Gupta, M. & Lata, P. (2014). Exploration of opinionnaire of subject experts for effectiveness of IT- enabled instructional package in science for X class students, Learning Community: An International Journal of Educational and Social Development 5(1),1-15.
8. Gupta, M. & Lata, P. (2014). Effectiveness of IT-enabled instructional package (ITEIP) on science achievement of X class students in relation to their gender. British journal of Education,2 (4),17-30.
9. Jena, P. C. (2013). Effect of smart classroom learning environment on academic achievement of rural high achievers and low achievers in science. International Letters of Social and Humanistic Sciences, 3,1-9.
10. Menon, A. (2015). Effectiveness of smart classroom teaching on the achievement in Chemistry of secondary school students. American International Journal of Research in Humanities, Arts and Social Sciences, 9(2), 115-120.
11. Sevindik, T. (2010). Future's learning environment in health education: The effects of smart classrooms on the academic achievement of the students at Health College. Telematics and Informatics, 27(3), 314-322.
12. Voogt, J. (2008). IT and the curriculum processes: Dilemmas and challenges. In J. Voogt, & G. Knezek (Eds.), International handbook of information technology in primary and secondary education (117-128). New York: Springer.